

**REMARKS**

Claims 1-10 have been examined and stand rejected.

Applicant thanks the Examiner for considering the reference cited with the Information Disclosure Statement filed February 4, 2005.

However, Applicant notes that the Examiner has failed to indicate acceptance of the Formal Drawings and acknowledge the claim for foreign priority. Applicant requests that the Examiner do so as soon as possible.

**Claim Rejections - 35 U.S.C. § 102(b)**

Claims 1-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Matsunaga (U.S. Patent No. 5,267,041). Applicant traverses this rejection as follows.

Applicant respectfully submits Matsunaga fails to disclose, at least, “an equalization amplitude control unit controlling an equalization coverage area of the received signal by controlling a filtering coefficient of the filter based on a level of a ghost, if the ghost is included in the received signal,” as recited in claim 1.

The Examiner contends that Matsunaga discloses this feature. In particular, the Examiner references the filter control block 34 which includes a references signal detection circuit 36. (*See* FIG. 3; col. 4, lines 62-67). This reference signal detection circuit 36 detects the ghost cancellation reference signal and outputs the same to a Fourier transform block 38, which transforms the ghost cancellation reference signal into a *frequency domain*. (col. 5, lines 1-3). A filter coefficient generation block 40 receives this transformed reference signal and generates a filter coefficient *based on the difference between the Fourier transformed ghost cancellation reference signal and a reference waveform*. (col. 5, lines 5-12).

Accordingly, Matsunaga discloses that the filtering coefficients are based on a difference between the frequency domain of the incoming ghost cancellation reference signal. Because the result of the Fourier transform into the frequency domain results in only (1) a set of discrete frequencies; and (2) an amplitude spectrum, which represents a discrete set of contributions of the various frequencies of the discrete set of frequencies, the filtering coefficients are not based on the detected level of a ghost signal. To the contrary, in Matsunaga they are based on the signal frequency components.

Consequently, Applicant submits that Matsunaga fails to disclose the filtering coefficients of the filter are based on *a level of a ghost*, as recited in claim 1. Because the ghost reference signal of Matsunaga is transformed to the frequency domain before the difference calculation for determining the filtering coefficients, the filtering coefficients are based on the frequencies of the ghost reference signal, not the level of the ghost signal.

Thus, Applicant respectfully submits claim 1 is allowable for this reason. Additionally, Applicant submits claims 2, 3 and 4 are allowable, at least because of their dependency and by virtue of the features recited therein.

Because claim 9 recites features similar to those argued above with regard to claim 1, Applicant submits that claim 9 is allowable for the same reasons set forth above. Additionally, Applicant submits claim 10 is allowable because of its dependency from claim 9 and by virtue of the features recited therein.

Regarding claim 5, Applicant submits Matsunaga fails to disclose, at least, “detecting a level of the ghost as a detected level of the ghost;” and “controlling an equalization coverage

area of the received signal based on the detected level of the ghost and performing channel equalization for the received signal.”

The Examiner contends that detecting a level of the ghost is disclosed by the gain limiting block 62. (*citing* col. 6, lines 63-67 and col. 5, lines 3-35). However, because this gain limiting block 62 merely receives the *recursive coefficients* from the filter coefficient generation block 38 after they are transformed by Fourier transform block 38, no ghost signal is even received by the gain limiting block 62. To the contrary, the portions of Matsunaga cited by the Examiner are directed to evaluating the recursive coefficients in the frequency domain such that they do not reach or exceed a critical level. (col. 6, lines 54-58).

Accordingly, neither this portion nor any other portion of Matsunaga discloses “detecting a level of a ghost.” Consequently, Matsunaga fails to disclose controlling an equalization coverage area of the received signal based on the detected level of the ghost.

Thus, Applicant submits claim 5 is allowable for at least this reason. Additionally, Applicant submits claims 6, 7 and 8 are allowable, at least because of their dependency.

#### **New Claims**

New claims 11 and 12 are hereby added by this Amendment and submitted to be allowable at least because of their dependency.

#### **Conclusion**

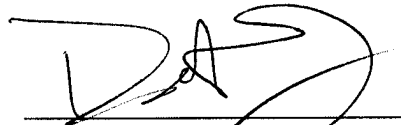
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

**AMENDMENT UNDER 37 C.F.R. § 1.111**  
**U.S. Appln. No. 10/727,994**

**Atty. Dkt. No. Q78477**

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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